COPY OF ALL CLAIMS IN THE CASE

Claims 1-11 (canceled)

12. (currently amended) A multitube reactor (13) which has a catalyst tube bundle (18) comprising numerous parallel catalyst tubes (17) arranged within an outer wall (15), said catalyst tube bundle (18) having from 10,000 to 50,000 catalyst tubes (17), and having means for introducing and discharging a heat transfer medium said means being adapted such that the heat transfer medium is essentially conveyed radially or transversely around the catalyst tubes, optionally redirected to assume a meandering path, ~~flowing around the catalyst tubes (17),~~ wherein the ratio t/d_a of tube spacing t to the external diameter d_a of a catalyst tube is ~~at least 1.3~~ is in the range from 1.3 to 1.6.

13. (previously presented) A multitube reactor as claimed in claim 12, wherein the ratio t/da of tube spacing t to the external diameter d_a of a catalyst tube (17) rises with increasing transverse dimensions of the catalyst tube bundle (18).

14. (previously presented) A multitube reactor as claimed in claim 12, wherein the catalyst tube bundle (18) has an essentially circular cross section having an external diameter d_{RBa} of more than 4 m.

15. (currently amended) A multitube reactor as claimed in claim 14, wherein the external diameter d_{RBa} of the catalyst tube bundle (18) is from 4 m to 1 m ~~and the ratio t/d_a of tube spacing t to the external diameter d_a of a catalyst tube (17) is in the range from 1.3 to 1.6~~.

16. (previously presented) A multitube reactor as claimed in claim 15, wherein the

external diameter d_{RBa} of the catalyst tube bundle (189) is from 4 m to 10m and the ratio t/d_a of tube spacing t to the external diameter d_a of a catalyst tube (17) is in the range from 1.3 to 1.5.

17. (previously presented) A multitube reactor as claimed in claim 12, wherein the catalyst tube bundle (18) has an essentially rectangular cross section with a tube bundle depth d_{RBt} measured parallel to the flow direction of the heat transfer medium of at least 1.3 m.

18. (currently amended) A multitube reactor as claimed in cl1im in claim 17, wherein the depth d_{RBt} of the catalyst tube bundle (18) is from 1.3 to 4 m ~~and the ratio *t/da* of tube spacing *t* to the external diameter d_a of a catalyst tube (17) is in the range from 1.3 to 1.6~~.

19. (previously presented) A multitube reactor as claimed in claim 12, wherein the reactor is divided, in the longitudinal direction of the catalyst tubes (17), into a least two zones (36,37), with a flow of heat transfer medium of different temperature being provided in each zone.

20. (previously presented) A method for carrying out catalytic gas-phase reactions, said method comprising the use of a multitube reactor as claimed in claim 12.

21. (previously presented) A method for carrying out oxidation reactions, in particular for the preparation of phthalic anhydride, maleic anhydride, acrylic acid, acrolein, methacrylic acid, glyoxal, phosgene, hydrocyanic acid or vinyl formamides, said method comprising the use of a multitube reactor as claimed in claim 12.